

**CITY OF ALAMEDA
MEMORANDUM ON INTERNAL CONTROL
AND
REQUIRED COMMUNICATIONS**

**FOR THE YEAR ENDED
JUNE 30, 2010**

This Page Left Intentionally Blank

**CITY OF ALAMEDA
MEMORANDUM ON INTERNAL CONTROL
AND
REQUIRED COMMUNICATIONS**

For the Year Ended June 30, 2010

Table of Contents

| | <u>Page</u> |
|--|--------------------|
| <i>Memorandum on Internal Control</i> | 1 |
| Schedule of Significant Deficiency | 3 |
| Schedule of Other Matters | 5 |
| Schedule of Current Status of Prior Year Significant Deficiency | 7 |
| <i>Required Communications</i> | 9 |
| Financial Statement Audit Assurance | 9 |
| Other Information Included with the Audited Financial Statements | 9 |
| Accounting Policies | 9 |
| Unusual Transactions, Controversial or Emerging Areas | 9 |
| Estimates | 10 |
| Disagreements with Management | 10 |
| Retention Issues | 10 |
| Difficulties | 10 |
| Audit Adjustments | 10 |
| Uncorrected Misstatements | 10 |

This Page Left Intentionally Blank

ACCOUNTANCY CORPORATION

3478 Buskirk Ave. - Suite 215
Pleasant Hill, California 94523
(925) 930-0902 • FAX (925) 930-0135
maze@mazeassociates.com
www.mazeassociates.com

MEMORANDUM ON INTERNAL CONTROL

December 13, 2010

Honorable Mayor, City Council, and City Auditor
of the City of Alameda
Alameda, California

We have audited the financial statements of the City of Alameda for the year ended June 30, 2010, and have issued our report thereon dated December 13, 2010. Our opinions on the financial statements and this report, insofar as they relate to the Community Improvement Commission of the City of Alameda, Alameda Reuse and Redevelopment Authority, Alameda Municipal Power, and the Housing Authority of the City of Alameda, are based solely on the report of other auditors. In planning and performing our audit of the financial statements of the City of Alameda as of and for the year ended June 30, 2010, in accordance with auditing standards generally accepted in the United States of America, we considered the City's internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we do not express an opinion on the effectiveness of the City's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be significant deficiencies or material weaknesses and, therefore, there can be no assurance that all such deficiencies have been identified. In addition, because of inherent limitations in internal control, including the possibility of management override of controls, misstatements due to error or fraud may occur and not be detected by such controls. However, as discussed below, we identified certain deficiencies in internal control that we consider to be significant deficiencies.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the City's financial statements will not be prevented, or detected and corrected on a timely basis. We did not identify any deficiencies in internal control that we consider to be material weaknesses.

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We identified certain deficiencies in internal control that we consider to be significant deficiencies that are included on the Schedule of Significant Deficiencies.

Included in the Schedule of Other Matters are recommendations not meeting the above definitions that we believe to be of potential benefit to the City.

The City's written responses included in this report have not been subjected to the audit procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

This communication is intended solely for the information and use of management, City Council, others within the organization, and agencies and pass-through entities requiring compliance with generally accepted government auditing standards, and is not intended to be and should not be used by anyone other than these specified parties.

Maze & Associates

CITY OF ALAMEDA
MEMORANDUM ON INTERNAL CONTROL
SCHEDULE OF SIGNIFICANT DEFICIENCY

2010-01 – Information Technology Best Practices Recommendations

Criteria:

In reviewing controls over the information systems, we expect to find a verifiable computer vulnerability management/patch management process, such that critical patches are applied in a timely manner, typically within thirty to sixty days. This patching process can be verified by regular vulnerability scanning. In addition, we expect to find audit logs on critical systems such that any material changes to that system are logged and reviewed for unauthorized activity. This is especially true for financial applications where by data integrity is crucial.

Condition:

We were informed by City staff that the current audit logs on the Financial Application Server, are not reviewed on a regular basis and when they are reviewed do not provide enough information to determine who changed what. Based upon an internal vulnerability scan run on May 6, 2010, we discovered three critical vulnerabilities on the Financial Application Server. These three vulnerabilities were the same vulnerabilities found by our internal scan run on March 11, 2009. The details of the vulnerabilities have been communicated to City staff.

Effect:

We believe it is reasonably possible that an attack on and unauthorized access to the City financial application systems could occur and not be detected during the normal course of operation. Individually, neither the financial application server vulnerability nor the lack of review of audit/event logging constitutes a significant deficiency. However, we believe that together these deficiencies raise the risk that changes to the financial application and/or data could go undetected.

Cause:

Due to a weakness in the City's flaw remediation (vulnerability/patch management) process, a critical vulnerability was not patched or by some other means mitigated in a timely manner. In addition, due to a lack of audit and accountability policy and procedures, financial application audit logs are not reviewed regularly and do not produce actionable information. As such, an adverse change to the data within the application would not be caught in the normal course of business. Together the breakdown of control can lead to an unauthorized change to the financial application that could lead to a financial misstatement.

CITY OF ALAMEDA
MEMORANDUM ON INTERNAL CONTROL
SCHEDULE OF SIGNIFICANT DEFICIENCY

Recommendation:

Currently, there are no Information Technology standards to which local governments are required to conform. Indeed, there are a wide variety of informal guidelines and suggested controls from many different organizations which local governments can use to implement appropriate controls to ensure adequate security over information technology. However, according to the National Institute of Standards and Technology (NIST) "State, local, and tribal governments, as well as private sector organizations, are encouraged to use the guidelines, as appropriate" NIST SP 800-100. In addition, the State of California singled the NIST standards out for adoption for State agencies in the California Information Security Strategic Plan (OCT 2009), "...by adopting the National Institute of Standards and Technology (NIST) 800-37 guidelines for certification and accreditation of information systems. Applying NIST guidelines to state government systems will demonstrate California's leadership in building a resilient, secure, and trustworthy digital infrastructure." We therefore recommend the adoption of NIST standards for information systems controls.

The following specific recommendations are found in the NIST control catalog and relate specifically to our findings:

- *Financial Application Server Vulnerabilities* - These vulnerabilities should be mitigated as soon as possible. The City should also implement a verifiable vulnerability/patch management process. The City should also evaluate and monitor the effectiveness of its information systems control procedures, including periodic vulnerability scans. If the vulnerabilities cannot be corrected, other mitigating controls such as host-based firewalls should be employed.
- *Audit/Event Logging* - We believe this is another important standard of NIST. Audit/event logs provide an effective detective control by automatically creating a record of every change made to the financial application and the server on which it runs on. The logs would include authorized changes and unauthorized changes made, to the server, application or data, by employees or would be hackers. In order for the City to effectively respond to potential unauthorized changes the City will need to have a process to review the audit logs for unauthorized changes on a regular basis. Given the financial system is at greater risk because of vulnerabilities, the systems logging and reviews of those logs are critical in detecting and responding to unauthorized changes in a timely manner. Without review of audit logs the City will not be able to detect material changes to the financial application or financial data during the normal course of business. NIST provides guidelines on audit/event log policies and processes (NIST SP 800-53 rev 3 § AU and NIST SP 800-92 Guide to Computer Security Log Management).

Management Response: The City acknowledges the audit comments on its Information System weaknesses. However, the City was not able to implement the recommendations in Fiscal Year 2009-10 due to a lack of available funds necessary to implement the recommendations listed. The City will consider providing funding to address these recommendations as part of the preparation of its 2011-12 operating budget.

**CITY OF ALAMEDA
MEMORANDUM ON INTERNAL CONTROL**

SCHEDULE OF OTHER MATTERS

2010-02 -- Bank and Investment Accounts Signature Cards

Signature cards for the bank and investment accounts should be updated immediately when there is a change in authorized signers. During our examination of the City's signature cards, we found that two departed employees were still listed as authorized signers in two bank accounts and one investment account.

We were informed by the City that due to the continuous staff turnover in Finance in recent months, the signature cards of the above accounts were not updated.

We recommend that the City review all of its signature cards immediately to ensure that all authorized signers are current. In addition, a step should be added to the employee departure checklist to ensure that outside parties (such as banks, investment advisors, bond trustees) are informed that the departed employee no longer represents the City.

Management Response: The City will implement this recommendation for Fiscal Year 2010-11.

2010-03 -- Payroll Database

Significant changes to the payroll database, such as employee additions or changes in pay rates, should be verified by another employee. Currently, the Administrative Technicians, who process payroll, have the ability to change data and add employees to the payroll database without an independent review by an employee who does not have access to the database.

We were told by Finance that the City's financial system cannot produce a report that tracks changes made to the payroll database for review purposes.

Changes to the personnel database should be reviewed by an employee who does not have access to the database. Also, employees who process payroll should not have the ability to change payroll database.

Management Response: The City will work towards implementing this recommendation for Fiscal Year 2010-11.

2010-04 -- Advance Collectability

The City's Golf Course Enterprise Fund advanced the ARRA General Fund Leasing Activity Subfund \$300,000 in fiscal year 2001 to fund predevelopment activities in connection with the Golf Course at Alameda Point. In fiscal year 2009, the City had planned to repay this advance in full in fiscal year 2010. However, during the current year, the City has not come to a conclusion with ARRA as to how this advance should be repaid.

As of June 30, 2010, this advance amounted to 6% of the total assets of the Golf Course Enterprise Fund. The City should determine if the advance is collectible for this Fund. If the advance is determined to be uncollectible, an operating transfer should be recorded and the advance written off.

Management Response: The City will look into whether the advance is collectible for the Golf Course Enterprise Fund during Fiscal Year 2010-11.

CITY OF ALAMEDA
MEMORANDUM ON INTERNAL CONTROL

SCHEDULE OF OTHER MATTERS

2010-05 -- Upcoming Governmental Accounting Standards Board Statement: No. 54 -- *Fund Balance Reporting and Governmental Fund Type Definitions (Effective for fiscal 10/11)*

This Statement establishes fund balance classifications that comprise a hierarchy based primarily on the extent to which a government is bound to observe constraints imposed upon the use of the resources reported in governmental funds.

The initial distinction that is made in reporting fund balance information is identifying amounts that are considered **nonspendable**, such as fund balance associated with inventories. This Statement also provides for additional classification as **restricted, committed, assigned, and unassigned** based on the relative strength of the constraints that control how specific amounts can be spent.

The **restricted** fund balance category includes amounts that can be spent only for the specific purposes stipulated by constitution, external resource providers, or through enabling legislation.

The **committed** fund balance classification includes amounts that can be used only for the specific purposes determined by a formal action of the government's highest level of decision-making authority. Amounts in the **assigned** fund balance classification are intended to be used by the government for specific purposes but do not meet the criteria to be classified as restricted or committed. In governmental funds *other than the general fund*, assigned fund balance represents the remaining amount that is not restricted or committed.

Unassigned fund balance is the residual classification for the government's general fund and includes all spendable amounts not contained in the other classifications. *In other funds*, the unassigned classification should be *used only to report a deficit balance* resulting from overspending for specific purposes for which amounts had been restricted, committed, or assigned. Governments are required to disclose information about the processes through which constraints are imposed on amounts in the committed and assigned classifications.

Disclosure of the policies in the notes to the financial statements is required.

This Statement also provides guidance for classifying stabilization amounts on the face of the balance sheet and requires disclosure of certain information about stabilization arrangements in the notes to the financial statements.

The definitions of the general fund, special revenue fund type, capital projects fund type, debt service fund type, and permanent fund type are clarified by the provisions in this Statement. Interpretations of certain terms within the definition of the special revenue fund type have been provided and, for some governments, those interpretations may affect the activities they choose to report in those funds. The capital projects fund type definition also was clarified for better alignment with the needs of preparers and users. Definitions of other governmental fund types also have been modified for clarity and consistency.

Management Response: The City will work towards implementing this recommendation for Fiscal Year 2010-11.

**CITY OF ALAMEDA
MEMORANDUM ON INTERNAL CONTROL**

**SCHEDULE OF CURRENT YEAR STATUS OF
PRIOR YEAR SIGNIFICANT DEFICIENCY**

2009-01 – Information Technology Best Practices Recommendations

We conducted an Information Systems Review with our audit which encompassed the financial information system and the network environment that houses it. We expanded our work in previous years beyond simply looking at financial information systems as a result of greater risks of unauthorized access caused by overall industry growth of web-based commerce and internet based financial systems. Internal controls that are present in the overall network environment have become more important and relevant to understanding the internal controls over the financial system. We believe Information System controls must be continuously improved and enhanced to stay ahead of the ever increasing sophistication of hackers and criminals.

Currently, there are no Information Technology standards to which local governments are required to conform. Indeed there are a wide variety of informal guidelines and suggested controls from many different organizations which local governments can use to implement appropriate controls to ensure adequate security over information technology. Our Information Technology staff has reviewed these informal guidelines and we have concluded that the certification and accreditation framework developed by the National Institute of Standards and Technology (NIST) for the Federal Information Security Management Act (FISMA) are the most appropriate for local government. NIST standards represent the minimum security requirements for federal government agencies information systems. We understand the U. S. Department of Justice recommends these for local law enforcement. Our procedures included performing an external network scan based on PCI DSS criteria and NIST in determining that internal control provides for:

- Internet access defenses including hacker prevention, detection and deterrent systems
- Security of data from physical or network access
- Adequately protecting data from unauthorized internal access
- Reasonable measures to ensure continuation of service

While the results of our work did not indicate material weaknesses, we did note exploitable vulnerabilities and a few areas which should be improved. A summary of these results are as follows:

- *General Information Systems Controls* - We compared the City's information systems controls with the various NIST standards and believe improvements should be considered for implementation such as employing Audit/Event logging, contingency planning and training and other areas. We have provided a detailed report to the City's Information Systems and Finance Staff which describe the control standards and the current status for their consideration.

As noted above, the City is not required to conform to NIST standards and could use another set of guidelines to ensure the adequacy of controls. However, we recommend the City select an appropriate industry standard such as NIST to plan, organize and monitor information security proactively. We also noted a significant deficiency due to the combination of the following two deficiencies:

**CITY OF ALAMEDA
MEMORANDUM ON INTERNAL CONTROL**

**SCHEDULE OF CURRENT YEAR STATUS OF
PRIOR YEAR SIGNIFICANT DEFICIENCY**

- *Financial Application Server Vulnerabilities* - Our scan found exploitable vulnerabilities in the City's financial systems (Financial application server and one randomly selected workstation) which could be used to gain control of those systems. Our results indicate a severe weakness in the information systems control processes. These vulnerabilities should be mitigated as soon as possible. In addition, the City should determine if other vulnerabilities exist in other workstations and correct them. In addition, the City should evaluate and monitor the effectiveness of its information systems control procedures, including periodic vulnerability scans. If the vulnerabilities cannot be corrected, other mitigating controls such as host-based firewalls should be employed.
- *Audit/Event Logging* - We believe this is another important standard of NIST. The City does not appear to review audit logs documenting any change, addition or deletion of user accounts within financial information systems on a regular basis. The City should have someone, without the rights to effect such changes, review the logs to ensure only authorized and appropriate changes are made. In addition, any administrative access such as upgrades or application modifications by IT personnel, outside consultants or vendors should also be reviewed.

We believe it is reasonably possible that an attack on, and unauthorized access to, the City financial application systems could occur and not be detected during the normal course of operation. Individually, a financial application server vulnerability and the lack of review of audit/event logging do not constitute significant deficiencies. However, we believe that together these deficiencies raise the risk that changes to the financial application and/or data could go undetected.

Current Year Status: See current year Significant Deficiency 2010-01.

ACCOUNTANCY CORPORATION

3478 Buskirk Ave. - Suite 215
Pleasant Hill, California 94523
(925) 930-0902 • FAX (925) 930-0135
maze@mazeassociates.com
www.mazeassociates.com

REQUIRED COMMUNICATIONS

December 13, 2010

Honorable Mayor, City Council, and City Auditor
of the City of Alameda
Alameda, California

We have audited the financial statements of the City of Alameda as of and for the year ended June 30, 2010, and have issued our report thereon dated December 13, 2010. Professional standards require that we advise you of the following matters relating to our audit.

Financial Statement Audit Assurance: Our responsibility, as prescribed by professional standards, is to plan and perform our audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit in accordance with generally accepted auditing standards does not provide absolute assurance about, or guarantee the accuracy of, the financial statements. Because of the concept of reasonable assurance and because we did not perform a detailed examination of all transactions, there is an inherent risk that material errors, fraud, or illegal acts may exist and not be detected by us.

Other Information Included with the Audited Financial Statements: Pursuant to professional standards, our responsibility as auditors for other information in documents containing the City's audited financial statements does not extend beyond the financial information identified in the audit report, and we are not required to perform any procedures to corroborate such other information. Our responsibility also includes communicating to you any information that we believe is a material misstatement of fact. Nothing came to our attention that caused us to believe that such information, or its manner of presentation, is materially inconsistent with the information, or manner of its presentation, appearing in the financial statements. This other information and the extent of our procedures is explained in our audit report.

Accounting Policies: Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies adopted by the City is included in Note 1 to the financial statements. There have been no initial selections of accounting policies and no changes in significant accounting policies or their application during 2010.

Unusual Transactions, Controversial or Emerging Areas: No matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus. There have been no initial selections of accounting policies and no changes in significant accounting policies or their application during 2010.

Estimates: Accounting estimates are an integral part of the financial statements prepared by management and are based on management's current judgments. Those judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ markedly from management's current judgments. The most sensitive accounting estimates affecting the financial statements are fair values of Investments.

- *Estimated Fair Value of Investments:* As of June 30, 2010, the City held approximately \$167 million of cash and investments, excluding discreetly presented component units, as measured by fair value. Fair value is essentially market pricing in effect as of June 30, 2010. These fair values are not required to be adjusted for changes in general market conditions occurring subsequent to June 30, 2010.

Disagreements with Management: For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter that could be significant to the City's financial statements or the auditor's report. No such disagreements arose during the course of the audit.

Management informed us that, and to our knowledge, there were no consultations with other accountants regarding auditing and accounting matters.

Retention Issues: We did not discuss any major issues with management regarding the application of accounting principles and auditing standards that resulted in a condition to our retention as the City's auditor.

Difficulties: We encountered no serious difficulties in dealing with management relating to the performance of the audit.

Audit Adjustments: For purposes of this communication, professional standards define an audit adjustment, whether or not recorded by the City, as a proposed correction of the financial statements that, in our judgment, may not have been detected except through the audit procedures performed. These adjustments may include those proposed by us, but not recorded by the City, that could potentially cause future financial statements to be materially misstated, even though we have concluded that the adjustments are not material to the current financial statements.

We did not propose any audit adjustments that, in our judgment, could have a significant effect, either individually or in the aggregate, on the City's financial reporting process.

Uncorrected Misstatements: Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. We have no such misstatements to report to the audit committee.

This report is intended solely for the information and use of the City Council, its committees, and management and is not intended to be and should not be used by anyone other than these specified parties.

Maze & Associates